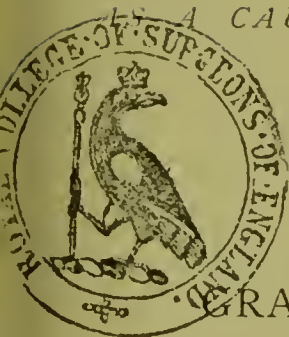


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ON
ABNORMAL SOFTNESS
OF THE
NULLIPAROUS UTERUS
AS
A FACTOR IN THE ETIOLOGY OF
UTERINE DISTORTIONS,
AND
A CAUSE OF IMPAIRMENT OF POWER OF
LOCOMOTION.



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ABNORMAL SOFTNESS OF THE NULLIPAROUS
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No one who has had practical experience in the diseases peculiar to women can fail to have observed how very frequently the ability to move about, to walk, and to take exercise of various kinds, is interfered with in cases where some disorder of the uterus is present. The symptoms produced by diseases of the uterus are, as is well known, numerous; but an appeal to clinical observation will invariably show that, of all these symptoms, no one is so frequently met with as impairment of the power of locomotion, sometimes in a slight degree only, but not rarely presenting itself in a very marked form, and constituting the principal symptom of which the patient herself speaks. This impairment of locomotion varies from that slight degree in which the patient states that, after walking a moderate distance, the exertion produces a pain in the back or in the inguinal region, to the severer form where the slightest attempt at walking causes such an amount of suffering that the patient is completely laid aside.

The complaint patients make of this difficulty is so common, that it is certainly worthy of more consideration than is usually bestowed upon it. The fact that patients suffering from uterine disease can not unfrequently walk for a short distance as well as other people has apparently prevented the due appreciation of this very common symptom—locomotive inability.

Some eight years ago, when my attention was particularly attracted to the subject, I was led by clinical observation to the conclusion that this impairment of locomotive power was associated with certain pain-

ful conditions of the uterus, and that it was particularly connected with alterations in the shape of the uterus. I then described certain cases in which the impairment was present in a very marked form, under the name of "uterine lameness". Since that time, the subject has much occupied my attention, and many cases have passed under my notice in which this difficulty of locomotion has presented itself in association with uterine disease.

Let me not be misunderstood. It is of course incontestable, that painful conditions of the other pelvic organs, of the ovary, Fallopian tubes, bladder, etc., may give rise to much discomfort in walking. This is not disputed. My object now is to deal with those cases in which the difficulty has its origin in a painful condition of the uterus, and to endeavour to throw some light on this important class of cases.

It is obvious enough that a subject of this nature can be best elucidated by a careful study of the more severe cases; for it is in these severe cases we should expect to find most readily facts susceptible of advantageous analysis. As an experience of some years has brought before me many such cases, and as these cases have persistently told me one and the same story—as, in fact, they have constituted for me a long series of experiments all tending to certain general uniform conclusions—these conclusions appear to me to possess value of some sort.

When I first wrote on the subject eight years ago, severe degrees of distortion of the uterus were, in my opinion, associated with considerable impairment of locomotion. Subsequent experience has not altered my view as to the importance of the change of shape of the uterus in actually causing the "lameness"; but further observation has made me acquainted with the fact that a very undue softness of the uterine tissues is a nearly constant accompaniment of this tendency to alteration of shape. Such unnatural softness of the uterine tissues, imparting to the whole organ an unusual and abnormal degree of pliability, I have come to regard as an exceedingly important feature in such cases. In the present paper, I desire to illustrate the connection between the existence of undue softness of the uterine tissues—such change of the shape of the organ as to amount to flexion of the uterus—and impairment of locomotion; and to point out particularly the great importance of softness of the uterus as a constituent element in such cases.

In the present communication, attention is directed to the nulliparous uterus. When pregnancy has occurred, other disturbing influences are necessarily brought to bear. In women who have had children, softness and undue pliability of the uterus are, I need not say,

not unfrequently observed. These latter cases unquestionably deserve attention, and are of great importance; but I have limited the consideration at the present moment to what concerns the uterus in the nulliparous state for two principal reasons; the first being that, from the circumstances of the cases, they are less complicated, and, the effect of pregnancy in producing softness being eliminated, they are more easy to study with advantage; and the second being, that they constitute a class of cases of great clinical interest.

Some idea may be given of the importance of the subject when I state that, within a period of eighteen months, I find as many as twelve cases recorded in my private case-book in which the impairment of locomotion associated with uterine disorder came under my notice in what I consider its typical form. A typical case may be defined as follows. The patient is comparatively young, more frequently unmarried, has been out of health and an invalid for some months or even for some years. There is general feebleness; but a striking feature of such cases is inability to walk more than a very short distance—sometimes not even so far as across the room—without experiencing so much aching discomfort in the lower lumbar and sacral regions, or anteriorly in the groins, that the exertion cannot be continued. There is no paralysis in the ordinary sense of the word, because the patient can generally walk a short distance, though, in a few more exceptional cases, the obstruction to locomotion is even more decided, and the normal movements of the lower limbs cannot be made if the patient be in the erect position. These latter extreme cases constitute a class by themselves;* and it may be a question, in some of them, whether there may not be disease of the spinal cord itself. In the typical cases now to be considered, the patient can walk, though very uneasily and imperfectly, and only for a short time. Further characteristics of the condition in question are, general inability to take food in proper quantity; a very constant accompaniment is a persistent feeling of nausea, intensified or brought on by any attempt to maintain the erect position for any length of time. Emaciation to a certain extent is always present. The recumbent position is generally the only easy one. Disorders of menstruation are frequently observed, but they vary in nature in different cases. The malady pursues a course troublesome and tedious in the highest degree; and, after months or years

* Thus a real paraplegia has been known to result from presence of retroversion or retroflexion of the gravid uterus. Dr. Priestley called attention to a case or cases of this kind some few years since.

of inefficiency for ordinary duties in every sense of the expression, the patient sinks into a confirmed invalid.

The twelve cases alluded to above, and which I select as the text of my remarks, occurred consecutively, commencing June 1873. There were many others in which the patients were less ill, but in which the disorder was essentially the same.

Now, in these typical cases, coupled with the general symptoms just detailed, there were found, on examination, to be present various degrees of alteration in the shape of the uterus, together with, in the majority of the cases, a very abnormal pliability of this organ. Clinical observation of the cases offered convincing proofs of the fact that the difficulty in locomotion arose from the circumstance that, in the erect posture, the alteration in the shape of the uterus became exaggerated and intensified.

The justification of the term "uterine lameness"—an expression I have only used because I know of no better one—is the connection which establishes itself in my mind between the two things, the discomfort produced in the uterus by the exaggeration of the change in form and the obstruction to locomotion. The patient does not walk, because frequent experience has convinced her that the result of the attempt will be productive of so much pain and inconvenience.

A further very important circumstance in these cases is the frequency with which nausea and tendency to vomiting are observed. This symptom is caused by the irritation set up by the flexion of the uterus. It has this very important result, that going on, as it frequently does, for months or even years, the interference with the general nutrition of the body is serious in the extreme. The patient loathes the sight of food; her friends finally give up the attempt to make her eat. The results can be imagined. The uterus becomes softer and weaker; the flexion is intensified, confirmed; and all the symptoms become exaggerated. I have seen cases in which death was really imminent from chronic uterine vomiting so produced, the patient being reduced to a condition of starvation. The nausea may be brought on by whatever aggravates the existing disease. Standing, getting out of bed, stooping, etc., may cause it to appear at any moment.

CASE I.—A governess, aged 20, had, when she first consulted me, been ill for over two years. The difficulty in walking, which had existed for longer than this, had finally become so great that she was almost paraplegic. There was great general feebleness. The amount

of food taken daily was exceedingly small, on account of the nausea the idea of food produced. She had, after struggling to continue her avocation as a teacher, been obliged to give up entirely. Menstruation was, I believe, though my notes are deficient on this point, painful and scanty in amount. Great prostration invariably followed any effort. There were great emaciation, sleeplessness, and much mental depression. The uterus was soft to the touch, entirely wanting in that firmness the healthy uterus possesses; it was markedly anteflexed. The treatment adopted was, firstly, very careful administration of soup, beef-tea, and small quantities of meat at very frequent intervals; secondly, maintenance absolutely in the recumbent position; and, thirdly, reposition of the uterus by the aid of the sound and continuous wearing of a rather small-sized cradle-pessary. In a month, she removed to the country. Five months later, her condition was very markedly improved for the better. The pessary was continued, and the "rest" treatment, together with the careful feeding, persevered in. Iron in the shape of phosphate was ordered from the first. This patient was able to resume her occupation to a great degree when I next heard of her some months later, and has been steadily and certainly gaining ground, her ultimate complete cure being apparently certain.

In this case, the initial element was, in my opinion, imperfect nutrition, whereby the tissues of the uterus were rendered soft, pliable, and atonic. The next important element was overexertion, whereby the uterus was pushed downwards and its shape altered. The anteflexion became more and more decided; the nausea prevented adequate consumption of food; and a third most important element was added, namely, starvation in a chronic form.

CASE II.—The patient, a lady aged 19, had been very ill for two years when I first saw her. A constant liability to vomiting was the principal symptom, this tendency being most marked on lying down. Four years ago, she had an attack of fever, and has never been well since. She is extremely feeble, and any exertion is distressing. Formerly, she could walk three miles a day easily. The sickness set in rather suddenly; it is now present two or three days in the week, nausea or vomiting occurring the whole day long, but most intensely—and this is a curious feature in the case—on lying down in bed at night. Her appetite is pretty good. The uterus is found to be very sensitive to the touch and softer than usual; the body of the organ is enlarged. There did not appear at this time to be much

anteversion present. The further observation of the case showed that the uterus was very unnaturally mobile, and that the organ was subject entirely to the action of gravity, the body of the uterus moving to an abnormal degree forwards or backwards, according to the position in which the patient lay. It was found most difficult to deal with this element in the case; for, while it was evident that steadying the uterus produced an amelioration in the symptoms, this steadying of the organ was most difficult to maintain, owing to the great laxity and size of the vaginal canal. The uterus was too irritable to allow of a stem-pessary. The treatment was discontinued after a time, removal to the country for the benefit of a change of air being necessary; and the further history is not known to me. This patient was treated at the All Saints Institution, and Dr. John Williams also saw the patient several times.

The attack of fever was the primary element in this case; the uterus was weakened thereby, in common with the body generally. The tonicity of the uterus was destroyed, and the nausea and vomiting were occasioned by the incessant bending of the uterus backwards and forwards which the motions of the body produced.

CASE III. — The subject of this case was an American, about twenty years of age, who had been, to use her own expression, "ill all her life". For some years, at all events, her health had been such that she could not enter into society or visit, or walk more than a few yards without extreme inconvenience. The first occasion of the illness appears to have been dancing during a catamenial period. Menstruation is now very irregular, the interval being sometimes as much as three months. Nausea is very commonly present. There is a very troublesome leucorrhœa. Of late, menstruation has become painful. There is a high degree of "nervousness", and this has much increased of late. There is a constant pain in the back, and frequently pain in the groins. The uterus is congested, softened, anteverted, and so low down in the pelvis that the fundus of the organ is felt almost immediately on introducing the finger through the vaginal roof. The sound does not enter easily. The treatment consisted in rest; use of the sound, by which the uterus was gradually elevated; and constant wearing of a cradle-pessary. After two months' treatment, the patient left, and was found, at the end of six months, so much better that she was considered to be practically cured. The use of the pessary was continued in all about eight months. Locomotion was easy and natural, and the result extremely satisfactory.

In this case, over-exertion in dancing at the menstrual period gave rise to anteversion and descent of the uterus. The symptoms were produced by this unnatural position of the organ; and the congestion, also a very important element in the case, appeared to be kept up by this position. Very little was done except to replace the uterus and to maintain it in its place; but the symptoms, so long continued and intractable, were by these measures subdued, and the natural activity of body restored.

CASE IV.—The patient was single, aged 23. The illness, in its present form, has lasted six months. Menstruation was irregular from the first, the interval being occasionally six months. Latterly, the periods have been regular; but since four years ago, at which time she injured herself by a leap, the periods have been painful. The patient is now unable to sit upright, and she can only walk a few minutes without suffering. She had previously been active. There is a constant pain in the back. The uterus was found to be soft, congested, and anteverted; introduction of sound painful. The treatment at first consisted in dorsal decumbency and occasional use of the sound. Later on, a cradle-pessary was used, and the patient went to the country. Complete restoration of health was the result, the power of walking gradually returning.

In this case, the general health was not much impaired. The case was a well-marked instance of displacement of the uterus occurring suddenly and rendered chronic. The morbid condition had latterly become aggravated, and the power of locomotion destroyed.

CASE V.—In this case, the patient, who had formerly been able to walk for as much as two hours at a time, was single, aged 27. Catamenia formerly very irregular. Walking is productive of great uneasiness and pain; a bearing down sensation always follows. There is frequent nausea on sitting up the first thing in the morning. It is evident that the chief illness dates from a period of three years ago, when the patient injured herself in drawing a cork from a bottle. This gave great pain at the time, and pain continued to be felt in the side for some weeks afterwards. There is leucorrhœa, occurring in the form of occasional gushes of fluid, evidently from the cavity of the uterus. The uterus is half an inch too long, anteverted; but the sound passes in easily, and reduction is easy. The organ is soft and pliable. The general health is bad; there is great feebleness. The general treatment ordered was restorative; rest was enjoined, and the uterus supported anteriorly by means of the cradle-pessary. In satis-

factorily effecting this latter object, great difficulty was experienced, owing to the abnormal length of the uterus. A certain degree of improvement for a time followed such treatment as I was able to carry out, only seeing the patient once at intervals of a few months. The general nutrition of the body had received a shock, which it was, however, difficult to withstand; and the patient has not yet recovered from the extremely feeble condition to which she had been reduced.

This case is a most important one, as exemplifying the occasional severe form which uterine disease may assume. The general health had become so much affected that little or no restorative power was at command, while the peculiar mechanical difficulties of the case also conspired to interfere with the efficiency of the treatment.

CASE VI.—The patient, aged 27, had, just before her marriage, or rather more than a year ago, experienced considerable discomfort following a very severe day's riding on horseback. She remained ill for some weeks afterwards, and appears never to have got over the effects of it. She has never been able to walk without pain since. The pain produced by walking extends over the body in various directions. Menstruation is painful. The uterus is found to be acutely anteflexed. For some few weeks, the patient was kept lying down; the uterus from time to time unbent by aid of the sound, and retained in its proper position by a cradle-pessary. She left town at the end of this treatment, continuing to use the support and feeling much better. She slowly but certainly regained her power of walking, and has remained quite well since.

This case is interesting as an instance of acute bending of the uterus produced suddenly by severe exertion. The uterus in this case was not so soft as in most of the other cases. The general health had been, on the whole, good prior to the occurrence of the displacement.

CASE VII.—The lady the subject of this case was twenty-six years of age. She had been married over seven years; there had been no pregnancy. For several years, she has not been well. There is a general feeling of prostration; always "weak"; cannot walk more than a very short distance. Menstruation is abnormal, the discharge occurring in a hesitating, interrupted, prolonged manner. There is leucorrhœa. The uterus is severely anteflexed, and the os uteri very far back and difficult to reach; in fact, there is a marked degree of anteversion as well as anteflexion. The treatment carried out in this case consisted mainly in elevating the body of the

utcrus anteriorly by means of the India-rubber-covered cradle-pessary, the horizontal posture, avoidance of the sitting position, and a careful nutritious dietary. The sound was used about once in two months, the patient being only seen at long intervals. The general improvement was very great after the lapse of a year; and subsequently the improvement continued in a very satisfactory degree, with occasional relapses.

The general nutrition was at a very low ebb in this case; the tissues of the uterus pliable to a great degree; and the long persistence of the malady was a very unfavourable element to deal with; but ultimate complete restoration to health may be anticipated.

CASE VIII.—The lady the subject of this case was single, a little over thirty years of age. Some hereditary weakness of constitution was evident. A severe illness occurring soon after menstrual commencement (diphtheria) left much prostration behind it. Of late years, suffered much from backache; and a fall one year ago seemed to have increased the intensity of various uterine symptoms. Menstruation is painful. There are frequent pains of a lancinating character radiating from the pelvis. There is emaciation. The appetite is very bad. Power of locomotion much reduced; chest stated by an eminent physician to be sound. On examination, it is ascertained that the uterus is anteverted in a very marked manner; the os uteri so far back that it cannot be reached, and the body of the organ enlarged. The treatment ordered was, maintenance of the recumbent position as much as possible, and use of a very small India-rubber air-ball pessary. This answered perfectly in restoring the patient to a condition of comfort; and the improvement obtained was, as I have since heard, permanent.

A feeble weakened state of system, a chronic severe form of anteversion, intensified by a fall, loss of comfort, and inability for all kinds of exertion, were the leading features of this case. The greater part of the discomfort evidently proceeded from the position of the uterus.

CASE IX.—The patient was a single lady, aged 27, who had never been "strong", in the ordinary sense of the word. The illness is of five years' duration. There is great discomfort produced by walking; a peculiar sensation in the groins is felt on making the attempt, also a feeling of nausea. Catamenia regular; have been occasionally painful. Uterus apparently enlarged anteriorly; sound not passed completely, owing to some difficulty. It was at first thought that a small fibroid

tumour might be present in the anterior uterine wall: an idea dissipated by further knowledge of the case. A small air-ball pessary was ordered and tried, but it did not answer; and a little later a rather large cradle ebonite pessary was adjusted (No. 4) with the large ring posterior. This was worn without discomfort. General restorative treatment was ordered. At first, little ground was gained; but, after about a year, information reached me that the patient was much better.

This was a very severe and difficult case. The uterus was a little enlarged and anteverted, but otherwise, I believe, natural. The malady was one of very long standing, the uterus having in course of years sunk lower and lower. The nutrition at large was affected profoundly by the inability to take food, this inability being due to the nausea produced by the displacement and enlargement of the uterus. The time occupied by the cure is necessarily long under such circumstances.

CASE X.—In this case, that of a single lady aged 33, it was elicited that the patient had had bad health ever since she left school, where, apparently, she was very insufficiently fed. There are pelvic aches and pains. Locomotion is attended with pain, and occasionally induces giddiness and oppression of breathing. On two occasions during the last year, there have been noticed attacks of a semiepileptic character—something beyond a mere hysterical attack, so far as can be learned. The uterus is found to be retroflexed, its tissues very soft; no great tenderness to the touch. Constant leucorrhœa; occasional swelling of the feet. The patient is thin, takes little food, and is generally weak. The recumbent position on the side and occasionally on the face, avoidance of sitting, reposition of uterus by the sound at intervals of a few days, adjustment of a Hodge-shaped small-sized pessary, and carefully arranged dietary, constituted the treatment. The pessary was worn continuously. There were no more “attacks”; the lady gradually and certainly improved. She was treated for a short time only, at intervals of six months; and, at the end of a year and a half, a quite satisfactory result obtained. Strength of body was restored; also power of walking. The uterus had not, however, sufficiently fixed in its proper position to remain so unassisted by the pessary.

In this instance, the disease had, I believe, slowly developed itself. The first causal element was the malnutrition at school. The retroflexion had probably become much intensified during the past year, causing the convulsive attacks above described.

CASE XI.—The subject of this case, a patient aged 26, had never enjoyed robust health. There was some time ago a “weakness” of the spine, necessitating much lying down. Backache, menorrhagia, frequent morning-sickness, and inability to walk, have been constant symptoms for a period of four years, and in a less degree longer than that. The patient is feeble in every sense of the word, quite incapable of any kind of exertion. The uterus is exceedingly sensitive to the touch; its tissues are very soft and entirely wanting in firmness; it is anteverted, and passage of the sound painful. There is an oedematous condition of the tissues around the uterus. This patient was treated on the same principles as others before described: a constant recumbent position; support of the uterus by cradle-pessary; and a most careful dietary, consisting for the most part of soup; tonic medicines also. The greatest difficulty was experienced in rousing the nutritive processes into anything like a state of activity, and nothing but great perseverance was adequate to deal with this. Improvement slowly followed, beginning when the patient could be got to take a moderate amount of food regularly. From an emaciated condition, she changed, after a year’s treatment, into one of stoutness, and the power of locomotion was decidedly mending. For some months, she was not permitted to walk further than across the room. The uterus gradually lost its great sensitiveness, and its tissues became perceptibly firmer. The complete restoration to health may be expected.

This is an exceedingly typical case.

CASE XII.—In this instance, the patient was single, aged 32. She suffers from a sensation of soreness and pressure anteriorly in the pelvis. She has never been able to walk much, but this difficulty has very much increased of late. It appears that a severe shake and blow received in a carriage accident nearly two years ago had a considerable share in causing the present state of things. The patient feels very “nervous”, in addition to other symptoms. The uterus is found anteflexed in a marked manner. It is a little longer than usual; the vaginal canal is very lax. The use of a cradle-pessary was in this case attended with marked benefit.

This case was, perhaps, hardly severe enough to bring it into quite the same category with the preceding cases, no general condition of feebleness having been present, and the case being of a less acute character; but it is interesting as exhibiting the first stage of the malady, before there had elapsed sufficient time to produce the more severe and troublesome symptoms.

I conceive that a careful consideration of the facts relating to these cases leads necessarily to the conclusion that the constitutional or general disturbance was an extremely important element in their pathology. The very great general weakness was a prominent feature, and so important did I consider it, that the very greatest care was bestowed in rectifying it. The cases related were, in fact, cases in which the general, as opposed to the local ailment, might have been considered by many as the only one demanding attention. While, however, it was undoubted that the general ailment was great, the evidence was to my mind not less convincing that the local ailment was very considerable. To the recognition of the twofold nature of these cases, and to the circumstance that the cases were managed in accordance with this view, must be attributed the success which was obtained in their treatment.

The views which I have been induced to take in regard to the pathology of such cases as those above cited I now submit for consideration. They involve nothing very surprising; nothing, perhaps, very novel, inasmuch as they imply the application of what may be termed well-recognised general principles. Cases such as the above have made me acquainted with the fact that, under certain circumstances, the nulliparous uterus loses its natural firmness, tenseness, and solidity; that, without any great alteration in its bulk, it may be found to have certain of its physical characters notably altered, these alterations consisting in a very marked softening and want of resistance of the tissues of the organ, recognisable by the touch very easily so far as the os and vaginal portion are concerned, and inferentially present also in the tissues of the body of the uterus. This softening of the tissues of the uterus may proceed to such an extent that the softness of the os uteri resembles that present in pregnancy. There is an utter absence of the normal "tonicity" of the structures, and there arises a consequent plasticity of the tissues which is abnormal. The whole uterus, thus softened, becomes, as a necessary consequence, unduly pliable and at the mercy of external disturbing mechanical agencies. This particular condition of the uterus is to be met with in the class of cases above related, and my observation of its frequent occurrence impels me to attach much importance to it as a pathological element.

I am aware that the fact of the existence of softness of the nulliparous uterus has been contested by my friend Dr. Tilt, who, criticising some observations published by me in the course of the last

year, stated that, according to his experience, softness such as here described has no existence. I am sorry to find myself at issue with Dr. Tilt on this subject. The matter is one of observation, and of the accuracy of my own observations on this matter I feel confident.

The character of the cases in which it is encountered leads us necessarily to the conclusion that this softness, loss of tonicity, want of resistance of the uterus, is dependent on an impairment of the nutrition of its tissues; that the uterus is badly nourished, and that its weakness is the natural outcome of this defect. They are cases, in fact, of malnutrition of the uterus. The arguments in favour of this view seem to be convincing. In the worst of the cases I have met with, the general health was almost invariably in a very weakened state. The patient had for a lengthened period eaten very little. The condition of the muscles generally, the absence of fat, the great languor, general debility, want of appetite, and other not less significant symptoms, pointed to the conclusion that these patients were suffering from chronic semi-starvation, and that the tissues of the uterus were weakened in common with those of the other organs of the body. The results of the application of an invigorating system of dietary in producing both local and general improvement offer corroborative evidence in favour of the exactness of this view.

The malnutrition of the body at large, in which the uterus in these cases so prominently shares, may be brought about in various ways. The most common cause with which I am acquainted is ignorance, on the part of those having the responsibility of the bringing up of young women, of the great necessity for regular full meals of animal and nourishing food when the system is rapidly developing and growing between the ages of twelve and seventeen. That the seed of many diseases is thus laid is incontestable. It was indicated in the clearest manner by inquiries into the previous history of most of the cases above delineated, that there had been some serious defects in regard to the dietary of the patients, more particularly at the critical age indicated. A deficiency of animal food was a marked feature.

It is well understood that the weakening influences of an insufficient dietary show themselves in different ways in different cases. The consequent atrophy and weakness usually, however, affect more decidedly one particular organ: in one case the lungs, in another the brain, and certainly sometimes the uterus. In the cases above related, the uterus was the organ which gave most evidence of actual textural change; but it may be that this organ—the uterus I mean—is more often in a

feeble condition as regards its nutrition than is suspected, for attention is not necessarily attracted to it in the slighter forms of the malady.

It cannot be doubted that the uterus preserves its normal shape, for the most part, by virtue of what may be termed its tonicity and natural rigidity. Its walls are of considerable thickness; at the point where the organ is most liable to be bent, its canal is extremely small, and its walls, proportionately to the canal, actually thicker than elsewhere. Moreover, these walls are normally endowed with considerable firmness and solidity. But in the cases above described these conditions are different. Softness and want of rigidity are substituted for firmness, and the fundus of the uterus is consequently at the mercy of external circumstances to a very serious degree. The most common result is, that the uterus, having normally a very slight tendency to anteversion, becomes more anteverted. This, a little later on, changes to slight flexion. This implies compression of the tissues in front of the internal os uteri. Any one who will take the trouble to make a vertical section of the uterus will see that to bend the organ must have the effect of compressing the tissues at this situation. It is the resisting power to this flexion residing in the normal uterus which is the principal safeguard against the occurrence of flexion; and, when this safeguard is destroyed by the loss of rigidity and tonicity in the uterine tissues at this situation, the further effects follow: the uterus is bent, and may remain persistently bent.

The precise condition of the uterine tissue described here as one of softness is an interesting study. The imperfectly nourished uterus is, I believe, almost always unduly soft. This softness may be conceived to be due either to actual deficiency of the muscular element or to defective nerve-action whereby the vaso-motor apparatus of the uterus is impaired and the vessels allowed to become unduly congested; or the softness may be due to the two conditions associated. Undue softness of the uterus I have occasionally observed to occur in what might be termed an acute way in cases where the uterus had been known to possess its normal firmness a short time previously. This temporary softening of the uterine tissues, another designation for which would be "temporary congestion", would seem to imply presence of disorder of the vaso-motor apparatus. The term "chronic inflammation" would be applied to this condition of softness of the uterus by some authorities. I do not use it because it differs from chronic inflammation in several important particulars in the typical cases above alluded to. There was, for the most part, no particular tenderness; generally there

is no swelling ; there may be no excess of secretion. It is quite true that these symptoms—tenderness, swelling, and excess of secretion—are frequently added later on ; but the softness by itself precedes the other conditions, and it is the softness itself which I am particularly anxious to direct attention to, considering, as I do, that it is the initial element of importance in the cases.

The feature to which I have particularly desired to direct attention is the incapacity for locomotion evident in all the cases. The soft pliable condition of the uterus appears to me to be responsible for this. Motion of the body generally alters the position and shape of the uterus ; and, this alteration of shape being productive of pain and uneasiness, locomotion is thus interfered with. Pain produced by motion is a frequent phenomenon in many cases of flexion of the uterus, but in these particular cases the impairment of locomotion is extreme in degree. In Chassaignac's work on operative surgery, published in 1862, occur some very practical remarks bearing on this question. Chassaignac expresses his opinion that the pains and discomforts with which cases of deformity or displacement of the uterus are attended are due to the "ballottements" or jars which the uterus so affected undergoes. He points out the absence of discomfort in the horizontal position ; the effect of such treatment as conduces to keeping the uterus in a state of rest in preventing pain and giving the patient ease. I have long held views identical with these of Chassaignac, but I only quite recently became acquainted with his writings on the subject. It is necessary, however, to carry the explanation a little further, in view of the clinical facts adducible. Pain is, indeed, produced by motion—frequently, indeed, in the way pointed out by Chassaignac ; but fundamentally it occurs because such motion increases the flexion of the uterus, which increase is of necessity painful to the patient. There is, as a rule, freedom from discomfort during lying down ; but the moment the body is placed vertically, the soft uterus gives way. The good effected by the night's rest in bed is undone by the exertion of the following morning. I consider that the chief cause of the pain is the compression or squeezing of the uterine tissues at the concave side of the bend which accompanies increase in the degree of the flexion. This explanation is amply sustained by the clinical history of such cases. Chassaignac's explanation, that shaking and jarring of the uterus are thereby prevented, is a part, but only a part, of the *rationale* of the efficacy of this rest. It is, indeed, surprising how immediately discomfort is made to cease when such steps

are taken as are calculated to prevent the motion, anterior or posterior, as the case may be, which the fundus uteri is disposed to take when left to itself; and how immediately it returns in the absence of such curative procedures.

My view is, that the relation of the phenomena observed in the cases now under discussion to the pathological changes or physical alterations of the uterus may be expressed concisely as follows.

1. The discomfort in walking, or produced by the vertical position, is due to an alteration of shape of the uterus.
2. The alteration in the shape of the uterus may be quite temporary, though by a process of repetition it tends to become permanent.
3. A softened condition of the uterine tissues renders the organ very liable to such alterations of shape as will give rise to uncomfortable sensations or even to acute pain.
4. The softened state of the uterus is usually associated with general debility of the whole system.
5. The softening is essentially an indication of malnutrition of the uterus.

The practical conclusions to be drawn from the foregoing considerations, as regards the curative procedures necessary in this troublesome class of cases, range themselves under two heads: first, the general state of the patient; and, secondly, the local disorder.

I have insisted on the defective general nutrition present in such cases as one of the prominent features. It is primarily necessary to devote very particular attention to this matter. According to my experience, it is frequently a matter of the greatest difficulty to ensure observance of the dietary ordered; and, unless these directions are perseveringly attended to—and it may be necessary to extend this over several months—no satisfactory results will be obtained. A patient whose vital energies have been much lowered cannot be restored to a condition of vigour in a short time; and it can, I believe, only be accomplished in one way—*i.e.*, by feeding the patient very frequently with very small quantities of food at a time, that food being chiefly animal food. I have had cases in which very material improvement in the general nutrition of the body was only obtained after months of assiduous treatment in this way; but I have hardly known a case where it has really failed eventually.

The second part of the treatment is the remedying of the diseased condition of the uterus. The principal indication in a not very severe case is in some way or other to prevent the uterus taking a vicious

shape or position. While it is soft and the flexion not confirmed, this is generally readily done by simply ordering the patient to maintain the horizontal position ; on the back, if there be ante flexion ; on the side, and occasionally on the face, if there be retro flexion. And, so long as the uterus is unaffected by the tonic measures adopted, these precautions are required. When the case is a confirmed one, however, and the flexion an established one, the position-treatment of the body, as a whole, is insufficient. Under these circumstances, a more direct treatment of the uterus itself is imperative. If the flexion be not treated, the uterus may become confirmed, literally hardened, in its abnormal shape. Added to which consideration is another, that, with a properly adjusted pessary, the patient may frequently be allowed a considerable amount of out-of-door exercise, and thus be able to get fresh air : a very important desideratum from every point of view.

In most of the cases which have come under my notice, I have limited local treatment to the simple carrying out of this principle of keeping the uterus from becoming flexed and displaced ; occasional astringent injections, using warm and never cold water for the purpose. The sound and the pessary have frequently been used conjointly, the one aiding the effect of the other. In one or two cases, I have tried a stem-pessary ; but, in a large majority of the cases, vaginal pessaries, the cradle for ante flexion, a modified Hodge pessary for retro flexion.

Many other *adjuvantia* would naturally suggest themselves in the management of these cases, on which I have no space to dilate. Remedies to assist the digestion, always weak under such circumstances : iron and quinine, sea-water baths, other baths containing bromine and iodine, all these and many others might be mentioned, which I have utilised in different cases with advantage. But the essence of the treatment has been to strengthen by nourishment the system at large, and to maintain the uterus in a state of quiescence and freedom from movement until it has recovered itself and is rendered strong in common with the bones, muscles, and other organs of the body.
